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[54] **METHOD AND COMPOSITIONS USEFUL IN PREVENTING EQUINE INFLUENZA**

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Related U.S. Application Data

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[52] **U.S. Cl.** **536/27**; 435/172.3; 435/69.1; 435/69.3; 435/320; 435/200; 435/201; 435/235; 935/12; 935/14

[58] **Field of Search** 435/68, 70, 172.3, 91, 435/235, 320, 238, 948, 235, 200, 201; 935/18, 12, 27, 65, 14; 536/27

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[57] **ABSTRACT**

Recombinant vaccines for immunizing horses against equine influenza virus (EIV) are disclosed. The DNA sequences encoding the hemagglutinin (HA) and neuraminidase (NA) glycoproteins from the two strains of EIV currently infective in horses are used to construct vaccinia carried vaccines, to design synthetic peptides for primer and booster administration, and to permit recombinant synthesis of HA and/or NA protein based vaccines. These DNA sequences also provide probes useful for preparing similar vaccines from fresh isolates of new strains generated by genetic drift.

2 Claims, 14 Drawing Sheets